

## ***Standards: Enabler of Sustainability***

### **AN ACADEMIC-INDUSTRY WORKSHOP**

**Sponsored by the National Institute of Standards and Technology, Michigan State University, NSF International, and Northwestern University**

May 17 and 18, 2017 \*\* The Henry Center, 3535 Forest Road \*\* Lansing, MI 48910

**Thanks to the generosity of the workshop sponsors there is no fee to attend this event. Pre-registration is required.**

***ALL SPEAKERS LISTED BELOW ARE CONFIRMED.***

***THE AGENDA WILL BE UPDATED AS ADDITIONAL CONFIRMATIONS ARE RECEIVED.***

#### **Day 1 (8:30am – 5:00pm)**

8:30 Doors open  
Networking Coffee

9:00 Welcome  
Doug Gage, Assistant Vice President, Michigan State University  
[Office of Interdisciplinary Research and Internal Grants](#)  
[Institutionally Limited Proposals, Bioeconomy Network](#)

9:10 Laying out the challenges  
Erik Puskar, Senior International Standards Specialist, Standards Coordination Office, National Institute of Standards & Technology (NIST)

9:25 Overview of the agenda  
Jeffrey Strauss, Associate Director, Big Problems and Technical Standards Initiatives, Northwestern University Buffett Institute

9:35 Keynote Addresses: Call to Action –  
Each speaker will speak to the meaning, importance and challenges of sustainability, why standards are a critical underpinning to meeting the Sustainability challenges, and need to consider standards in teaching

- Dr. Wolfgang Bauer, Senior Consultant in the Office of the Executive Vice President for Administrative Services, (focused on energy efficiency and renewable energy); previously Distinguished Professor and Chair, Physics Department, Michigan State University

10:15 BREAK

## **10:25 Panel #1: Industry and Government stakeholders**

**Government:** What are the implications of changing the regulatory and policy environment; what are the implications for teaching?

- Holly Elwood, Senior Advisor, Environmentally Preferable Purchasing Program, U.S. Environmental Protection Agency

**Industry:** What are the key sustainability challenges and related standards issues facing industry; how are companies addressing these challenges? What standards have been most impactful standards? What are the career implications? What are industry workforce needs? What do new employees need coming in to the workforce?

- Douglas Mazeffa, Environmental Project Manager, Sherwin-Williams Company and Lecturer, Baldwin Wallace University
- David Green, Manager Applied Sustainability, Admixture Systems, BASF
- Denise Van Valkenburg, Eco-Inspired Design / Sustainability Manager, Corporate Safety and Sustainability, Herman Miller, Inc.

Discussion/Q&A

12 Noon LUNCH

**1:00 Panel #2: Education and Standards Professionals** – Panel members respond to the Keynote and the Challenges presented by Panel #1

**Standards organizations:** Standards work related to sustainability; related programs implications for standards student preparation

- Mary Saunders, Vice President for Government Relations and Public Policy, American National Standards Institute (ANSI)
- Brad Miller, Director of Advocacy & Sustainability, BIFMA
- Pamela Brody-Heine, Director of Standards, Green Electronics Council

**Education community:** How standards are being incorporated into the higher education curricula

**MSU faculty:**

- Thomas Smith, Associate Director, College of Agriculture & Natural Resources, Institute of Agricultural Technology, MSU
- Ryan Kimbirauskas, Center for Integrative Studies in general Science, MSU and/or Claudia Vergara, Research Specialist, MSU (NIST curricula development grantees)

**Other schools:**

- Norman Christopher, Executive Director for the Office of Sustainability Practices, Grand Valley State University, Allendale, Michigan

## **2:30 “Birds-of-a-Feather” Breakouts and Discussion**

Breakout groups will be defined by sector of sustainability education e.g. engineering, management environmental management, sustainable manufacturing, agriculture, etc.

Theme: What are the industry challenges and implications for teaching – i.e. how can students be prepared to address and contribute to solving these challenges?

2:30-2:40 Introductions and expectations

2:40-4:00 Focal Questions: Discussion

- *What sustainability challenges have standards underpinnings? How will standards impact solutions?*
- *What are related implications/requirements for education? What topics need to be covered in courses?*
- *What are the challenges to teaching: materials? faculty knowledge? course content? etc.? How can these be overcome?*
- *How can standards content be incorporated into the curricula? Consider business, engineering and other possible “homes” and specific courses; what are course/discipline specific issues and how can they be addressed?*
- *What specific knowledge and skills will professionals require to support the target domains and related standardization? What types of support and assistance enable the integration of standards into a sustainability curriculum?*

4:00 Reports from the Breakout Groups and open discussion

4:40 Summary of Day 1 and Lead in to Day 2 - Jeff Strauss

5:00 ADJOURN Day 1

## **Day 2 (8:00am – 12 Noon)**

8:00 Doors open, coffee

8:15 Standards Simulation Exercise: An interactive, cross-country/cross-agenda Standards negotiation  
The goal of this session is to expose the challenges and complexity of standards development and present a pedagogical tool.

Jeff Strauss, Moderator

9:45 BREAK

10:00 Report-out: Discussion of the exercise; what lessons were learned; the potential use of this model in the academic and corporate setting and opportunities for adaptation in academic and institutional contexts

11:00 Wrap-up discussion: Next Steps and Action Items

12 Noon ADJOURN